

Application Serial No. 09/657,250 - Filed September 6, 2000

REMARKS

Claims 1-28 were pending. Claims 1, 7, 13, 14, 15, 18, 20, 22, 24, 26 and 28 have been amended. Claim 29 has been added. Accordingly, claims 1-29 are pending.

In the present Office Action, claims 1, 4, 7-9, 12 and 15-20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by newly cited reference, U.S. Patent No. 6,611,877 (hereinafter "Korn"). In addition, each of claims 1, 5, 22-26 and 28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over newly cited reference U.S. Patent No. 5,699,107 (hereinafter "Lawler") in view of Korn. Finally, each of claims 2, 3, 6, 10, 11, 13, 14, 21 and 27 are rejected under 35 U.S.C. § 103(a).

While Applicant respectfully traverses the above rejections, amendments to the claims are provided herein in order to further clarify the nature of the claimed invention. Applicant believes these clarifications readily distinguish the present claims from the cited art and respectfully requests reconsideration.

As amended, claim 1 now recites a system which includes "an event broker configured to register a plurality of event bookings in response to requests from one or more clients, wherein each said event booking identifies an event which may occur in the future and an action to be taken should the identified event occur; one or more event managers, wherein each of said one or more event managers is configured to detect particular types of events; and one or more action handlers, wherein each of said one or more action handlers is configured to initiate particular types of actions; wherein each of said event broker, said clients, said event managers, and said action handlers comprise distinct functional entities."

In contrast to the above, Korn is directed to a system for enabling an application to be notified of events occurring in connection with a graphical user interface with respect to types of objects without having to register a listener for each object. In particular, Korn teaches:

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“The invention provides a number of advantages. In particular, the invention provides an event notification arrangement 20 which permits an application program, such as an assistive technology application program 32, to receive notifications of events which occur in connection with objects comprising the graphical user interface, without the necessity of requiring it (that is, the assistive technology application program) itself to actually register a listener for each of the objects, thereby relieving the assistive technology program of the need to either identify the objects comprising the graphical user interface that already exist when it (that is, the assistive technology program) is initialized, and to register listeners therewith, or to monitor the subsequent instantiation of such objects by the operating system so that it can determine whether the register listeners therefor, and to register listeners with the ones of the objects for which it (that is, the assistive technology program) wishes to receive notifications.” (Korn, col. 9, lines 6-22).

With respect to prior claim 1, the present Office Action seeks to correlate particular features with elements described in Korn. In particular, the recited event broker is correlated with the operating system (22), both the recited client and the recited action handler are correlated with an application (23), and the recited event manager is correlated with a listener (26). It is first noted that the clarifying amendment “wherein each of said event broker, said clients, said event managers, and said action handlers comprise distinct functional entities” already serves to distinguish from the cited art. In Korn, a “client” and “action handler” are one in the same entity [a given application (23) as suggested in the Office Action]. This distinction is not without import. As noted in the description of the present application:

“The systems described above, however, have limitations which prevent them from being extended to a generalized event booking mechanism in a broadcast television receiver. For example, in the case of email notifiers and calendar services on desktop computer systems, the events which can be detected and the actions which can be initiated in response thereto are specifically defined for particular applications (e.g., an email application displays an icon in response to receiving a new email message.) The applications provide internal mechanisms which cannot be used by other applications. If a different application requires an additional type of event to be detected or an additional type

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of action to be initiated, that application must typically provide its own mechanism for detecting that type in event and initiating the respective action. Because this type of mechanism has statically defined events and actions, and requires additional application code (as well as additional memory to store the code,) it is not suitable for the limited resources of a broadcast television receiver. Mechanisms which use triggers (such as VBI or ATVEF triggers) that are delivered in a broadcast signal suffer from these same limitations. These triggers detect statically defined events and initiate statically defined actions. Further, if the action includes launching an application, the application must be present. That is, it cannot be downloaded upon detection of the event and then launched. Consequently, these mechanisms are not suitable for a generalized event booking system in a broadcast television receiver." (page 1, line 25 – page 2, line 14).

It is noted that while the figures accompanying the present application depict the discussed entities as being separate, it is not necessarily the case that in a real software implementation they are really separate. Rather, the software components are represented as such in order to facilitate discussion of their distinct functions.

As may be appreciated, Korn is also generally described by the above description of prior art systems. In the present case, the claimed invention recites distinct functional entities which serve to overcome the limitations of the prior art. It is further noted that with such a system, any type of event manager and any type of action handler may be utilized by a particular client. Consequently, even though a particular client may have no ability to detect a particular type of event or initiate a particular type of action, the client may register a booking with a centralized broker which will enable such a detection and corresponding action. Further, detected events and corresponding actions may be mixed and matched in any manner desired. Therefore, while the system may initiate action A in response to Event E today, action B may be initiated in response to event E tomorrow. To accomplish this, the client may simply access and modify a stored booking.

In addition to the above, the claim has been amended to clarify "an event broker configured to register a plurality of event bookings in response to requests from one or more clients, wherein each said event booking identifies an event which may occur in the future and an action to be taken should the identified event occur." This clarification

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regarding the nature of bookings clearly distinguishes over the cited art. For example, in the present Office Action it is stated that:

“The “event manager” or listener 26, in response to detecting an event, is configured to notify the “event broker” or operating system 22 of a first event, which corresponds to the event booking.” (paragraph 3).

Therefore, the present Office Action states that a listener notifying the operating system of a detected event is an event booking. However, it is believed that the above highlighted features are readily distinguished from these teachings of Korn.

In view of the above, Applicant submits each of the independent claims are readily distinguished from the cited art and are in condition for allowance. Applicant notes the 35 U.S.C. § 103(a) rejections directed to the independent claims also depend heavily on Korn.

In addition to the independent claims, the dependent claims include features neither taught nor suggested by the cited art. For example, claims 7, 18 and 29 recite the event broker is configured to store the event bookings in non-volatile storage. Also, claim 13 recites “wherein clients are configured to access event bookings which have been stored by the event broker, said access comprising a query, a modification, or a termination of a stored event booking, and wherein said event broker is configured to control said accesses to said event bookings by clients based on permissions associated with said accesses and said event bookings.”

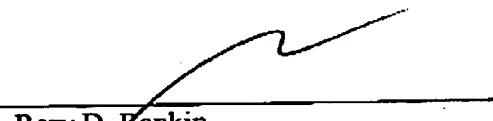
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CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5266-02600/RDR.

Respectfully submitted,


Rory D. Rankin
Reg. No. 47,884
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin,
Kowert, & Goetzel, P.C.
P.O. Box 398
Austin, TX 78767-0398
Phone: (512) 853-8800

Date: July 23, 2004